

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows (*all deletions are bracketed or stricken and additions underlined; both are shown in boldface solely for the convenience of reference*):

Claims 1 to 13 (canceled)

Claim 14 (currently amended): A spread spectrum signal processing apparatus for processing a correlation signal from a correlator, comprising:

a correlator for correlating a spread spectrum signal with a reference signal;

a control means for supplying each of a plurality of divided codes sequentially to said correlator as the reference signal in accordance with the order of arrangement in a spreading code, said divided codes being formed by dividing the spreading code, which has a prescribed length and is used to despread said spread spectrum signal ~~into the divided codes~~; and

a signal processing means for summing a correlation signal which is output corresponding to each of the divided codes and for outputting a summed result, said signal processing means comprising a plurality of delay elements for delaying a signal by a time corresponding to a length of each of said divided codes, each of said delay elements being connected in cascade;

wherein an output of said correlator is coupled to an input of each of said delay elements and to an output of a last stage of said delay elements.

Claim 15 (currently amended): A spread spectrum signal processing apparatus for processing a correlation signal from a correlator, comprising:

a correlator for correlating a spread spectrum signal with a reference signal;

a control means for supplying each of a plurality of divided codes sequentially to said correlator as the reference signal in accordance with the order of arrangement in a spreading code, said divided codes being formed by dividing the

spreading code, which has a prescribed length and is used to despread said spread spectrum signal ~~into the divided codes~~; and

a signal processing means for summing a correlation signal which is output corresponding to each of the divided codes and for outputting a summed result, said signal processing means comprising a plurality of delay elements for delaying a signal by a time corresponding to a length of each of said divided codes, each of said delay elements being connected in cascade;

wherein an output of said correlator is coupled to an input of a first stage of said delay elements; and

wherein said correlation signal is summed with a delay signal from each of said delay elements.

Claim 16 (previously presented): The signal processing apparatus of claim 15 further comprising an adder for summing a delay signal from each of said delay elements and said correlation signal.

Claim 17 (currently amended): A spread spectrum signal processing apparatus for processing a correlation signal from a correlator, comprising:

a correlator for correlating a spread spectrum signal with a reference signal;

a control means for supplying each of a plurality of divided codes sequentially to said correlator as the reference signal in accordance with the order of arrangement in a spreading code, said divided codes being formed by dividing the spreading code, which has a prescribed length and is used to despread said spread spectrum signal ~~into the divided codes~~; and

a signal processing means for summing a correlation signal which is output corresponding to each of the divided codes and for outputting a summed result;

wherein, until a peak of said correlation signal is detected, said control means generates said divided codes of a prescribed order in the arrangement order of said spreading code among the divided codes successively; and

wherein, after a peak of said correlation signal is detected, said control means starts to generate said divided codes from the next of said prescribed order.

Claim 18 (currently amended): The signal processing apparatus of claim 17, wherein said signal processing means comprises:

an A/D converter for converting said correlation signal into a digital signal;
a memory means for storing the digital signal from said A/D converter as data signal; and

a signal processor for summing said digital data corresponding to said each of the divided codes and for outputting the summed result, said signal processor starting summing said digital data by ~~making reference~~ referring to a time at which said control means supplies said ~~divided code~~ plurality of divided codes to said correlator.

Claim 19 (currently amended): The signal processing apparatus of any one of claims 14 to 18, wherein said divided codes ~~are constituted to~~ have an identical length.

Claim 20 (previously presented): The signal processing apparatus of any one of claims 14 to 18, wherein:

the correlator is a surface acoustic wave convolver; and
said divided codes have a same length as or a shorter length than an interaction length of said convolver.

Claim 21 (currently amended): A spread spectrum communication system for performing communication using a spread spectrum signal between at least two communication equipments, at least one of said communication equipments comprising:

synchronization detecting means for performing synchronization
recognition of said spread spectrum signal; and

despreading means for performing despreading on said spread spectrum
signal by ~~making reference~~ referring to a synchronization recognition signal from said
synchronization detecting means;

wherein either said synchronization detecting means or said despreading
means comprises a spread spectrum signal processing apparatus according to any one
of claims 14 to 18.